ABSTRACT

A nonuniform portion of a film thickness on a substrate owing to effects of a support column, a substrate mounting portion, and the like which constitute a substrate holder is eliminated, and uniformity of the film thickness of the substrate is enhanced.

A substrate processing apparatus houses plural wafers (substrates) held on a boat (substrate holder) in a processing chamber, supplying processing gas to the heated processing chamber, thereby performing film-forming processing for the wafers. The boat includes: at least three support columns 15 provided substantially vertically; plural wafer support portions 16 (substrate mounting portions) which are provided at multistages on the support columns and mount the plural wafers substantially horizontally at a predetermined interval; and plural ring-like plates 13 arranged on the support columns 15, and provided substantially horizontally at a predetermined interval with respect to the wafers supported on the wafer support portions 16.

[Selected Drawing] FIG. 1